

Inventory of *Doing What Works* (dww.ed.gov) Professional Development Materials

Topic: Using Student Achievement Data to Support Instructional Decision Making (DDDM)

TOPIC SUMMARY			
Title/Media Type	Title/Media Type Who Description		
Transforming Teaching and Learning Through the Effective Use of Data		This overview shows 5 research-based practice recommendations for data-driven instructional decision making to improve instruction and learning. Educators can use these practices to refine teaching and learning to better meet students' needs.	
Multimedia Overview			
7:57 min			
Using Student Achievement Data to Support Instructional Decision Making Visual Diagram		A visual overview of 5 recommended practices based on using student achievement data to support instructional decision making. Together, these practices are part of a comprehensive and cohesive framework for using data to support instructional decision making.	
Data- Driven Instructional Decision Making Expert Interview 6:23 min	Laura Hamilton, Ph.D. RAND Corp. & University of Pittsburgh's Learning Sciences and Policy Program	Dr. Hamilton explains the 5 recommended practices and offers considerations for implementation of the practices.	
Digging Into the Statewide Testing System Expert Interview 3:19 min	Christopher Woolard, Ph.D. Ohio Department of Education	 Dr. Woolard describes the Ohio statewide data system. The data system includes 3 major components that provide various data and resources: (1) the Success website, (2) Data Driven Decisions for Academic Achievement, and (3) the value-added system. 	



TOPIC SUMMARY			
Title/Media Type	Who Description		
Ohio Decision Framework	Deborah Telfer, Ph.D.	• 2 state administrators present information on a statewide data tool that districts use as a decision-making tool for school improvement.	
Expert Interview 4:20 min	Ohio Department of Education	• The Ohio Decision Framework is a web-based tool used by districts in Stage 1 of the Ohio Improvement Process.	
	Betsy Apolito Montgomery County Educational Service Center Affiliation	 Data are pre-populated into the tool to help districts conduct an in-depth needs assessment to identify the districts' most critical needs. Regional support teams and facilitators work with districts to develop a strategy to help districts implement the decision framework and improve instructional practice. 	



Practice: Make data a part of an ongoing cycle of instructional improvement. (Cycle of Improvement)

	PRACTICE SUMMARY			
Title/Media Type	Description			
Making Data Part of an Ongoing Cycle of Instructional Improvement Multimedia Overview	 Teachers can use data to help guide their instructional decision making and improve their ability to meet their students' learning needs by engaging in a cycle of instructional improvement. This cycle includes collecting and preparing data using results from multiple assessments. Then teachers can interpret data and develop hypotheses about what may be needed to help students improve. To complete the cycle, teachers make instructional changes to test these hypotheses and assess their impact on student learning. 			
5:39 min	• The cycle can continue as teachers collect and interpret additional student achievement data and modify instruction to improve student learning.			

	LEARN WHAT WORKS		
Title/Media Type	Who Description		
Prepare, Inquire, Act Expert Interview 7:34 min	Elizabeth A. City, Ed.D. Harvard Graduate School of Education	 Dr. City discusses the importance of having teachers establish and use a process for looking at data. Teachers can use a problem-solving model by preparing the data, asking questions of the data, and then seeking solutions to identified concerns based on the data. In particular, teachers can enact a 3-step "Prepare, Act, Inquire" cycle of instructional improvement. She encourages teachers to work through this cycle to test hypotheses, make changes to instruction, and revisit the cycle to assess the impact of the changes. 	
What Do You See in These Data? Expert Interview 6:31 min	Elizabeth A. City, Ed.D. Harvard Graduate School of	 Dr. City suggests teachers work collaboratively as they learn to use data in a cycle of instructional improvement. To provide a framework for collaboration, teachers can use protocols when talking about data. 	
0.51 111111	Education	• Charts, tables, or graphs can visually show patterns or trends in the data.	



SEE HOW IT WORKS			
Title/Media Type	Who	Description	Sample Material
Helping Struggling Students by Using the SAT Process Audio Interview 5:27 min	Shawna Harney River Ridge Elementary School Villa Hills, KY	 An elementary school principal talks about the Student Assistance Team (SAT) process used to remove barriers to learning, intervene quickly, and support struggling students. The SAT meets frequently to form, review, and assess intervention plans tailored to the student. 	Student Assistance Team (SAT) Referral Form—A student referral form that documents teachers' areas of concern, and records data and interventions implemented. Instructional Integrity Checklist—This checklist tracks and monitors daily progress of interventions. It is useful for interventions that do not have embedded progress monitoring assessments.
Intervening Early Using Data From Multiple Assessments Audio Interview 3:44 min	Pamela Riggans Thompson Elementary School Houston, TX	 An elementary school curriculum skills specialist describes various assessment tools staff use to screen all students to determine their weaknesses and strengths. Teachers create action plans by grade level and for individual students to ensure achievement gaps are addressed. 	Classroom Walkthrough Notepad—An observation tool used to collect instructional data, which is then examined alongside achievement data, to support instructional decision making. Teacher Scorecard—A form used to track students' performance data for a 6-week period. The information is analyzed to make decisions about instructional strategies.
Start With the Data Audio Interview 2:49 min	Dominique McCain Shotwell Middle School Houston, TX	 A middle school science skills specialist describes how teachers are supported with curriculum training and weekly meetings to discuss data. By looking at data, teachers can analyze why students may be struggling in certain areas. Teachers collaborate to plan focused interventions targeted at specific skills pieces. 	No Sample Materials
Supporting Data Use Through Teacher Collaboration Time (Part 1) Video Interview 4:02 min	Susan Allen Jacob Hiatt Magnet School Worcester, MA	 A 3rd-grade teacher describes how teachers develop outlines to use data to guide their collaboration sessions. Teachers refer to a variety of data, including developmental assessment data and state test scores. 	Standards on Practice Steps—A K–6 planner used to develop rubrics for evaluating student work and making classroom decisions. Consultancy Practices—A protocol teachers use to conduct consultancy sessions within or across content areas and grade levels.

DWW: Using Student Achievement Data to Support Instructional Decision Making – last updated 12/22/2010



SEE HOW IT WORKS			
Title/Media Type	Who	Description	Sample Material
Supporting Data Use Through Teacher Collaboration Time (Part 2) Video Interview 6:27 min	Mary Quillen Kathleen Hannon Jennifer Conlon Jacob Hiatt Magnet School Worcester, MA	3 elementary teachers demonstrate ways they use collaboration time to make decisions related to a single struggling student and for class and schoolwide curricular decisions.	Collaborative Assessment Conference Protocol—A planner for K–6 teachers to use when carrying out a collaborative assessment conference. Using Data to Drive Action—K–6 teacher collaboration teams use these resource documents to guide data discussions to inform decision making.
Using the Three-Week Assessment Cycle Audio Interview 4:32 min	Susan Baker Valerie Tremback MacArthur Ninth Grade School Houston, TX	 A testing coordinator and algebra teacher discuss how they use testing cycles to assess instruction and student progress. Assessment data are quickly analyzed so instructional staff can act on the results. 	English Class Data Reflection Sheet—A data reflection sheet completed by high school teachers after each 6-week unit. Based on their analysis, teachers may determine certain objectives need reteaching in some way.

	DO WHAT WORKS			
Tool	Description			
Learning Together: Making Data Part of a Cycle of Instructional Improvement	This tool can be used to provide teacher training to develop an understanding of key concepts on using data to support the cycle of instructional improvement.			
Self Assessment: Can You Complete the Cycle of Instructional Improvement?	A chart to help state, district, and school leaders assess their processes for using data to improve instruction.			
Planning to Use Data for Instructional Improvement: District and State Levels	This planning tool serves as a guide to planning a cycle of instructional improvement. It can help a leader evaluate existing procedures and see where improvements are needed.			
Planning Templates	Technical assistance or other support providers working with state education agencies, districts, and schools can use these comprehensive planning templates to assess their use of data to support instructional decision making.			



Practice: Teach students to examine their own data and set learning goals. (Student Use of Data)

PRACTICE SUMMARY			
Title/Media Type	Description		
Teaching Students to Examine Their Own Data Multimedia Overview 6:19 min	 It is important for students to learn how to understand and use their own data. Students can learn to set goals and gain a sense of ownership over their learning when they analyze their data. Teachers can provide tools to help students understand their data and timely and specific feedback on progress. 		

LEARN WHAT WORKS			
Title/Media Type	Type Who Description		
Helping Students Gain Ownership Over Their	Jonathan Supovitz, Ed.D.	• Dr. Supovitz states that when students examine their own data, they gain ownership and a sense of control over their learning.	
Learning Expert Interview	University of Pennsylvania	• As part of teaching students to examine their data, teachers need to provide quality feedback that is timely, specific, and easy to understand. Feedback should include actions needed to improve.	
4:54 min		• It is helpful to provide students with tools to analyze their data, such as charts and rubrics. Rubrics are especially helpful because they provide explicit goals and the dimensions of performance to meet goals.	

	SEE HOW IT WORKS				
Title/Media Type	Who	Description	Sample Material		
Engaging Students in Data Use Through Student Portfolios Slideshow w/ audio (9 slides)	Connie Bunker Jacob Hiatt Magnet School Worcester, MA	 A 4th-grade teacher describes using portfolios to involve students in data analysis. Portfolios contain assignments selected by both students and teachers from each core subject plus art, music, and other subject areas. Student and teacher reflection on the portfolios is a key component. 	Jacob Hiatt Portfolio Philosophy and Table of Contents—This resource describes the purpose of the student portfolios used in grades K–6 and provides a table of contents for items to be included.		



	SEE HOW IT WORKS			
Title/Media Type	Who	Description	Sample Material	
Clear Expectations for Students Slideshow w/ audio (9 slides)	MacArthur Ninth Grade School Houston, TX	 Product guides and accompanying rubrics provide clear expectations for students and assessment criteria. Teachers provide the product guides and rubrics for all major assignments in core subjects. Students self-assess using product guides and rubrics before teachers provide feedback to gain ownership over their learning. 	Research Plan Product Guide and Grading Rubric— A resource to help students better understand expectations for completed assignments. Teachers create product guides for core subject assignments. Each product guide is tailored to the subject and assignment. Rubrics accompany product guides to help students better understand the grading criteria for assignments.	
Data Boards Help Students Set Learning Goals (Part 1) Video Interview 4:38 min	Ann Ruchala Jacob Hiatt Magnet School Worcester, MA	 A 6th-grade teacher explains how the school uses data boards to show student progress on the Measures of Academic Progress (MAP) benchmark assessment. Before each benchmark assessment, teachers meet with each student individually and help them set a goal for their score. 	Student Goal Setting Worksheet—Students in grades 3–6 complete this worksheet during an individual meeting with their teacher. Students record their goals for their achievement on the Measures of Academic Progress benchmark assessment in reading and math.	
Data Boards Help Students Set Learning Goals (Part 2) Video Interview 4:54 min	Ann Ruchala Jacob Hiatt Magnet School Worcester, MA	 A 6th-grade teacher models a goal-setting conference with a student to review scores, consider his growth, and set a new goal. The student decides on the goal, records it on the worksheet, and places her/his symbol in the appropriate place on the data board. 	Student Goal Setting Worksheet—Students in grades 3–6 complete this worksheet during an individual meeting with their teacher. Students record their goals for their achievement on the Measures of Academic Progress benchmark assessment in reading and math.	
Taking Ownership Video Interview 4:06 min	Marielys Garcia Michael Somerville Thurgood Marshall Academy Public Charter School Washington, DC	 High school teachers describe how they use student portfolios to teach students how to analyze data, set learning goals, and track their own academic progress and behavior. This helps students understand expectations. Teachers provide detailed rubrics for each component of the portfolios. Students give a presentation on their portfolios to a committee of two to three faculty and/or community members each semester. 	Academic Goal Reflection Template—A template completed by high school students to analyze data, reflect on their progress toward goals, identify areas of improvement, and write reflections. Analyzing Your PSAT Score Report—Students in grades 9–11 use template to analyze their PSAT data, to compare it to scores across the county, and to identify areas of improvement.	

DWW: Using Student Achievement Data to Support Instructional Decision Making – last updated 12/22/2010



	SEE HOW IT WORKS			
Title/Media Type	Who	Description	Sample Material	
Go Back and Reflect Video Interview 4:11 min	Renata Gaddy Shotwell Middle School Houston, TX	 A middle school language arts teacher describes the Data Analysis Booklets that students complete after classroom reading assessments. Students reflect on their test answers and examine why they chose the answers they did. This helps them determine their weaknesses and how to improve. Data Analysis Booklets give students ownership of their learning, and allows them to see their improvement and to become problem solvers. 	Response to Intervention Student Exit Survey and Reflection—An exit survey and reflection completed by middle school students when they exit an intervention. Students note why they were in RtI, initial and ending test scores, and their feelings on the progress made. Students respond to open-ended questions on the helpfulness of assignments and offer recommendations to improve RtI.	
	MacArthur Ninth Grade School Houston, TX		Student Objective Analysis—The Cutting of my Long Hair—A template used by high school students to analyze results of a reading benchmark assessment on a story. After completing the item analysis, students reflect on three open-ended statements.	

DO WHAT WORKS		
Tool	Description	
Learning Together: Supporting Student Self-Assessment	An outline for a workshop focused on the importance of teaching students to use data to examine progress and set learning goals for themselves. The outline provides several structures to foster discussion about student use of data.	
Planning for Student Self-Assessment	Teachers can use this planning tool to plan strategies for student self-assessment. The tool provides various strategies, explains the benefits of each, and gives an example of how the strategy could be implemented.	
Teacher Self Assessment: Supporting Students' Use of Data	Educators can use this tool to assess their practices for helping students use their own data, which contributes to students' sense of ownership over their learning.	
Planning Templates	Technical assistance or other support providers working with state education agencies, districts, and schools can use these comprehensive planning templates to assess their use of data to support instructional decision making.	

DWW: Using Student Achievement Data to Support Instructional Decision Making – last updated 12/22/2010



Practice: Establish a clear vision for schoolwide data use. (Vision for Data Use)

PRACTICE SUMMARY		
Title/Media Type	Description	
Establishing a Clear Vision for Schoolwide	• A culture of data use in a school can ensure that data-based decisions are made frequently, consistently, and appropriately. This culture cannot develop, however, without a clear vision, developed among all staff, for schoolwide data use.	
Data Use Multimedia Overview	• A data team can clarify the school's vision for data use, model the use of data to make instructional decisions, and encourage and support other school staff to do the same.	
5:31 min	• The schoolwide plan should clearly articulate how the school will use data to support school-level goals for improving student achievement. It reflects the concerns and needs uncovered through the data teams' discussions and other staff input.	
	A crucial element to establishing a clear vision and using data effectively is having a common language around its use.	

LEARN WHAT WORKS		
Title/Media Type	Who	Description
Collaborative Structures for Data Use Expert Interview 5:44 min	Richard Halverson, Ph.D. University of Wisconsin- Madison	 Dr. Halverson describes how schools need to integrate a data plan within the school's overall school improvement plan. A data plan can provide intermittent goals and specific steps needed to reach goals. Schools should consider data at multiple levels, from state assessment data to classroom and student-level data. A data team can facilitate implementation of the plan, provide leadership to change the school's culture, and guide a coordinated approach to systematic data use to support instructional decision making.

SEE HOW IT WORKS			
Title/Media Type	Who	Description	Sample Material
Establishing a Common Understanding Audio Interview 3:08 min	Alexandra Pardo Thurgood Marshall Academy High School Washington, DC	 A high school academic director talks about how the school defines key concepts that encompass the school's vision for data use including data, mastery, proficiency, and achievement. To establish a common understanding of the 	No Sample Materials



	SEE HOW IT WORKS		
Title/Media Type	Who	Description	Sample Material
		critical concepts on data use, staff engaged in conversations and participated in professional development activities. The definitions are included in the faculty and staff handbook.	
You Can't Hide From Data Audio Interview 3:10 min	Marjorie Stealey Norview High School Norfolk, VA	 A high school principal discusses how staff look at and reflect on data. Through this approach, staff members hold each other accountable for improving instruction. The school has adopted the philosophy, "you can't hide from the data." 	No Sample Materials
Earning Trust Audio Interview 2:26 min	Sara McClain Thompson Elementary School Houston, TX	 An elementary school principal talks about the culture of trust established at the school. Principals can earn trust through strong communications and collaboration between principal and teachers and among teachers. 	No Sample Materials
Carrying Out the Vision Audio Interview 2:41 min	Wanda Walker Shotwell Middle School Houston, TX	A middle school principal describes staff participation in group data sessions during which particular data are targeted and broken down into objectives and student subgroups.	Department Collaboration—This professional development document outlines the expectations for staff collaboration.



DO WHAT WORKS		
Tool	Description	
Learning Together: What is a Data-Driven Vision	This tool provides a workshop focused on developing the capacity of all staff to use data. The workshop can be tailored to the experience of the teachers.	
Creating a Data Team	These questions can help establish a clear vision for schoolwide data use. School leaders can use this as a guide to help them determine who among their staff would be best suited to become a part of the data team.	
Creating a Data Plan	This planner can be used as a guide to begin writing a plan for data use that aligns with the school's and district's goals for improving student achievement.	
Structuring Teacher Collaboration	Administrators and teachers can use this planning tool to review the collaboration times established in the school. The tool can help identify any gaps or overlaps to ensure adequate collaboration times are established to examine student achievement data to guide instructional decisions.	
Planning Templates	Technical assistance or other support providers working with state education agencies, districts, and schools can use these comprehensive planning templates to assess their use of data to support instructional decision making.	



Practice: Provide supports that foster a data-driven culture within the school. (Data-Driven Culture)

PRACTICE SUMMARY		
Title/Media Type	Description	
Fostering a Data- Driven Culture Within	• School and district staff members need a thorough understanding of how data can be used to support instructional decision making. This understanding must then be combined with adequate knowledge and skills to use that data appropriately.	
a School Multimedia Overview	• Schools can provide such supports as a data facilitator or coach, structured time for collaboration, and professional development. These supports can help schools build capacity among all staff for data use.	
5:55 min	• Structured time can be set aside for staff to collaboratively analyze and interpret student achievement data and to talk about instructional changes. This time also can be used for professional development on data use.	
	• It is important for staff to learn how to use data in a way that is consistent with school goals.	

LEARN WHAT WORKS		
Title/Media Type	Who	Description
Supporting Teachers in Understanding and Using Data Expert Interview 5:17 min	Ellen B. Mandinach, Ph.D. Senior Research Scientist, WestEd	 Dr. Mandinach emphasizes the importance of professional development to help teachers learn how to use data to apply it to instructional decision making. The professional development needs to be aligned with the school's goals and needs. It also needs to be provided close to the time that teachers will examine data and be ongoing.
Supporting a Culture of Data Use Expert Interview 3:47 min	Jeffery Wayman, Ph.D. University of Texas at Austin	 Dr. Wayman describes the importance of providing supports to encourage teachers to use data. Schools can have a data facilitator or another specified person whose job it is to help with data use. This position must be well defined and well structured. Ongoing collaboration and professional development are key ways to support the use of data and to build capacity within the school and district.



SEE HOW IT WORKS			
Title/Media Type	Who	Description	Sample Material
Data Afternoons Slideshow w/ audio (9 slides)	Keisha Hutchinson Thurgood Marshall Academy Washington, DC	A high school data facilitator discusses how teachers use the structured half-day professional development opportunities to collaboratively analyze student benchmark data and to develop classroom instructional plans that will guide instructional changes.	Classroom Instructional Plan—Within a week of each eight-week benchmark assessment, administrators and teachers meet to collaboratively analyze the data and brainstorm strategies for improving instruction. Afterwards teachers use this planner to document changes and describe their instructional plan for the next benchmark period.
Visualizing Data in the Progress Pad Audio Interview 3:07 min	Deneen Zimmerman Kenton County School System Kenton, KY	 An elementary education director explains the Progress Pad, which is a room set aside to visually display student data. Color-coded pocket charts with cards for each student help teachers visualize student progress. Teachers note interventions on the back of the student's card. 	No Sample Materials
It's Not Something That's Static Video Interview 4:22 min	Craig Mullenix Chris McCurry MacArthur Ninth Grade School Houston, TX	 A high school principal and biology chair describe how staff examine data to identify student strengths and needs, and to align curriculum to those needs and to standards. The school uses data to develop curriculum throughout the year. Based on assessment results, teachers may change their instructional approach to better fit certain content areas. 	No Sample Materials
Breaking It Down Audio Interview 3:33 min	Angelle Mitchell Libby Lewis Shotwell Middle School Houston, TX	 An 8th-grade science teacher and a 7th- grade math teacher describe the Subgroup Master Data spreadsheet used by all teachers at their school. Teachers use the spreadsheet to identify achievement gaps and tailor their instruction according to the identified needs. 	No Sample Materials



	SEE HOW IT WORKS		
Title/Media Type	Who	Description	Sample Material
	Shotwell Middle School Houston, TX		Professional Development and Training Expectations—A list of different professional development topics related to supporting data use and the role of the staff who participate in each topic.

DO WHAT WORKS		
Tool	Description	
Learning Together: What Supports are Needed to Foster a Data-Driven Culture?	A professional development workshop about the types of supports that are needed to foster a data-driven culture in schools. The workshop also focuses on ways to enhance existing supports that are provided by a school and/or district.	
Data Facilitator/ Coach: Activity Log	Data facilitators/coaches or other professionals that provide support for teachers in using data can use this planner to log their daily activities.	
Professional Development Assessment Tool	District and school leaders can use this self-assessment to evaluate professional development provided to staff for data use. Based on an analysis of the results of this assessment, schools can plan a coherent approach for professional development.	
Planning Templates	Technical assistance or other support providers working with state education agencies, districts, and schools can use these comprehensive planning templates to assess their use of data to support instructional decision making.	



Practice: Develop and maintain a districtwide data system. (Districtwide Data System)

PRACTICE SUMMARY		
Title/Media Type	Description	
Developing and Maintaining a	• Districts can implement a high-quality data system that integrates data together for easy reporting and analysis to a range of audiences, from district administrators and specialists to school principals and teachers.	
Districtwide Data System Multimedia Overview	• A properly implemented system is necessary to give all stakeholders the information they need to improve student achievement. For a data system to meet such a wide variety of needs, it is essential to involve a variety of stakeholders in the system's planning, design, and implementation.	
5:28 min	Once the district determines how it will acquire a data system, district personnel can plan a staged rollout and professional development opportunities to prepare staff without overwhelming them with new technology.	
	• Professional development can also be differentiated based on individuals' skill levels, organizational role and responsibilities, and instructional focus.	

LEARN WHAT WORKS				
Title/Media Type	Who	Description		
What Makes a High- Quality Districtwide	Jeffrey C. Wayman, Ph.D. University of Texas-Austin	• Dr. Wayman discusses the importance for districts to have a high-quality data system because of an abundance of student data. Schools need to access data quickly and from only one place.		
Data System? Expert Interview		• It is helpful for the system to be easy to use and understand, flexible in the ways educators can access student data, and expandable.		
5:31 min		Districts can first identify their needs and then select or build a system that meets those needs.		
		• It is important to implement the system slowly so users do not feel overwhelmed.		



SEE HOW IT WORKS					
Title/Media Type	Who	Description	Sample Material		
Immediate Feedback Audio Interview 4:22 min	Richard Blair Aldine Independent School District Houston, TX	 An executive director for research and evaluation talks about how the districtwide data system integrates data from state and district assessments, the student information system, and includes components for lesson planning and classroom observation data. Classroom teachers can utilize this data to make instructional decisions. 	Stakeholder Perspectives on Data System Use—An overview of how different stakeholders use a districtwide data system.		
District Supports for Data Use Audio Interview 3:35 min	Sara Ptomey Aldine Independent School District Houston, TX	 An executive director of curriculum and instruction discusses the supports provided at the district level for using data. The district ensures a minimum of one skills specialist at each school to help teachers learn to use data, model lessons, and support instructional planning. 	Protocols to Support Data Use—This is a compilation of meeting protocols to guide staff as they work collaboratively to regularly and systematically use multiple sources of student data to develop and revise action plans, write assessment items, analyze data, and plan lessons.		

DO WHAT WORKS				
Tool	Description			
Learning Together: Considerations for the Implementation of a Districtwide Data System	An outline of a workshop for district and school personnel interested in learning about implementing a data system. Participants have the opportunity to discuss pertinent issues and challenges that are relevant to their districts, brainstorm about possible solutions, and propose next steps.			
Districtwide Data System Implementation and Staging Questions	A planner to assist district administrators to consider all aspects of implementing a districtwide data system.			
Data Collection Planner: Reviewing the Use of an Existing Data System	A planner to facilitate planning for improvement of data systems based on data collected from users. It can be used to identify data collection goals and to document decisions made based on the data collected.			
Planning Templates	Technical assistance or other support providers working with state education agencies, districts, and schools can use these comprehensive planning templates to assess their use of data to support instructional decision making.			